Operating Instructions

Replacement housing for plics instruments

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31150-EN-050802

1 About this document

1.1 Function

This operating instructions manual has all the information you need for quick mounting and setup of a replacement component. Please read this manual before you start setup.

1.2 Target group

This operating instructions manual is directed to trained personnel. The contents of this manual should be made available to these personnel and put into practice by them.

1.3 Symbolism used

Information, tip, note
This symbol indicates helpful additional information.

Caution, warning, danger
This symbol informs you of a dangerous situation that could occur. Ignoring this cautionary note can impair the person and/or the instrument.

Ex applications
This symbol indicates special instructions for Ex applications.

● **List**
The dot set in front indicates a list with no implied sequence.

→ **Action**
This arrow indicates a single action.

1 **Sequence**
Numbers set in front indicate successive steps in a procedure.

2 For your safety

2.1 Authorised personnel

All operations described in this operating instructions manual must be carried out only by trained, specialised personnel authorised by the operator. For safety and warranty reasons, any internal work on the instruments must be carried out only by personnel authorised by the manufacturer.

2.2 Appropriate use

Oscillator, emitting electronics, housing or process components are replacement components for existing sensors.

2.3 Safety information for Ex areas

Please note the Ex-specific safety information for installation and operation in Ex areas. These safety instructions are part of the operating instructions manual and come with the Ex-approved instruments.

2.4 Environmental instructions

Protection of the environment is one of our most important duties. That is why we have introduced an environment management system with the goal of continuously improving company environmental protection. The environment management system is certified acc. to DIN EN ISO 14001.

Please help us fulfil this obligation by observing the environmental instructions in this manual:

- Chapter "*Storage and transport*"
- Chapter "*Disposal*"

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3 Product description

3.1 Configuration

Scope of delivery

The scope of delivery encompasses:

- Replacement housing with screwed cover
- Locking ring
- Check bracket
- 2 screws M3x5
- 2 lock washers 3.2 mm
- Documentation
  - this operating instructions manual

Components

The housing consists of the basic body as well as a screwed cover for the electronics or connection compartment.

Basic body and screwed cover are available in different materials. Depending on the order, the screwed cover is available with or without inspection window for the indicating and adjustment module PLICSCOM.

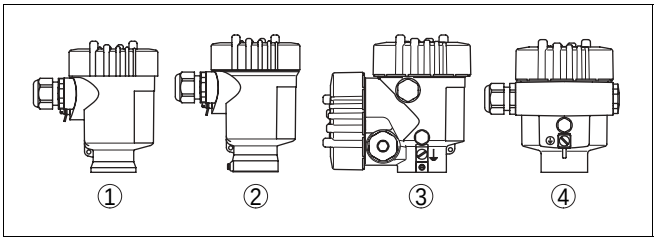

Fig. 1: Versions of the replacement housing for plics instruments
1 Plastic
2 Stainless steel
3 Alu double chamber
4 Alu single chamber

3.2 Principle of operation

Area of application

The housing is suitable as replacement unit for the following plics sensors:

- VEGAPULS series 60
- VEGASON series 60
- VEGAFLEX series 60
- VEGABAR series 50 and 60
- VEGASWING series 60
- VEGAVIB series 60
- VEGACAL series 60

- VEGACAP series 60.

3.3 Storage and transport

Packaging

Your instrument was protected by packaging during transport. Its capacity to handle normal loads during transport is assured by a test acc. to DIN EN 24180.

The packaging of standard instruments consists of environment-friendly, recyclable cardboard. For special versions, PE foam or PE foil is also used. Dispose of the packaging material via specialised recycling companies.

Storage and transport temperature

- Storage and transport temperature see "*Supplement - Technical data - Ambient conditions*"
- Relative humidity 20 ... 85 %

4 Mounting

4.1 General instructions

If the housing is defective, it can be replaced by the user.

In Ex applications, only a housing with appropriate Ex approval must be used.

If there is no housing available on site, it can be ordered from the responsible VEGA agency.

Assignment

The housings are suitable for all VEGA plics sensors in respective version and signal output. First of all check by means of the following overview if you have the suitable housing.

The order number is stated on the delivery note of the replacement housing.

4.2 Mounting preparations

Single chamber housing

The single chamber housing PLICSGEH.2... is suitable for all instruments listed in chapter *"3.2 Principle of operation"*. It is available with the following approvals:

- PLICSGEH...**X** (X = without approvals)
- PLICSGEH...**1** (1 = approval XM, CM, acc. to VEGA product list)
- PLICSGEH...**2** (2 = approval DA, DM acc. to VEGA product list)
- PLICSGEH...**3** (3 = approval GX, CK acc. to VEGA product list)

Double chamber housing

The double chamber housing PLICSGEH2K ... is suitable for the instruments listed in chapter *"3.2 Principle of operation"*, except for VEGASON 64, 65, 66 as well as VEGASWING 60 and VEGAVIB 60. It is available with the following approvals:

- PLICSGEH2K...**X** (X = without approvals)
- PLICSGEH2K...**1** (1 = approval XM, CX, CA,CM, CI, UX, UF acc. to VEGA product list)
- PLICSGEH2K...**2** (2 = approval GX, CK acc. to VEGA product list)
- PLICSGEH2K...**3** (3 = approval DX, DA, DM, DI acc. to VEGA product list)
- PLICSGEH2K...**4** (4 = approval DX, DA, DK, UX acc. to VEGA product list)

- PLICSGEH2K...**5** (5 = approval AX, AK acc. to VEGA product list)
- PLICSGEH2K...**6** (6 = approvals GX acc. to VEGA product list).

Double chamber housing VEGASON 64, 65, 66

The double chamber housing PLICSGEH2K64 ... is only suitale for VEGASON 64, 65 and 66. It is available with the following approvals:

- PLICSGEH2K64...**X** (X = without approvals)
- PLICSGEH2K64...**5** (5 = approval AX, AK acc. to VEGA product list)
- PLICSGEH2K64...**6** (6 = approval GX acc. to VEGA product list)

Tools

The following tools are required for dismounting the existing housing and mounting the replacement housing:

- magnetic Phillips head size 1
- pliers for locking ring (version axle)
- screwdriver 4 mm (only with stainless steel and Alu double chamber housing)

4.3 Dismounting steps existing housing

First of all the electronics module is dismounted and the existing housing removed.

Dismounting the electronics

The electronics module is located in the electronics compartment. The below illustrations show the respective position of the electronics compartment in a single or double chamber housing.

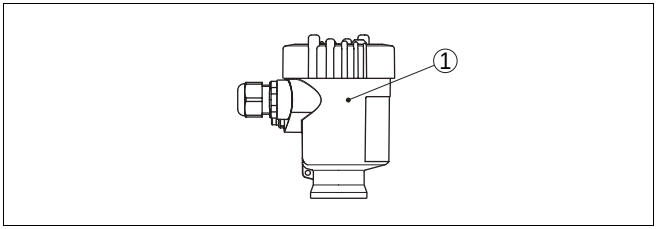

Fig. 2: Single chamber housing
1 Position of the electronics compartment

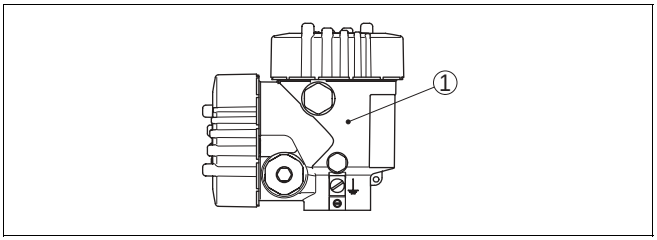

Fig. 3: Double chamber housing
1 Position of the electronics compartment

Proceed as follows:

1 Switch off power supply

2 Remove the housing cover of the electronics compartment as well as with Alu double chamber housing of the connection compartment

3 Disconnect the connection cables acc. to the operating instructions manual of the respective sensor

4 Loosen the two screws of the electronics module with the Phillips head size 1

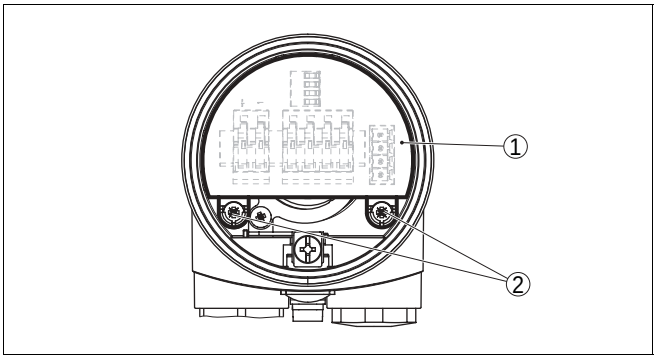

Fig. 4: Loosen the screws
1 Electronics module
2 Screws (2 pcs.)

5 Pull the electronics out by holding the opening levers.

Remove the housing

Proceed as follows:

1 Loosen the screws of the check angle and the locking ring with a screwdriver size 1

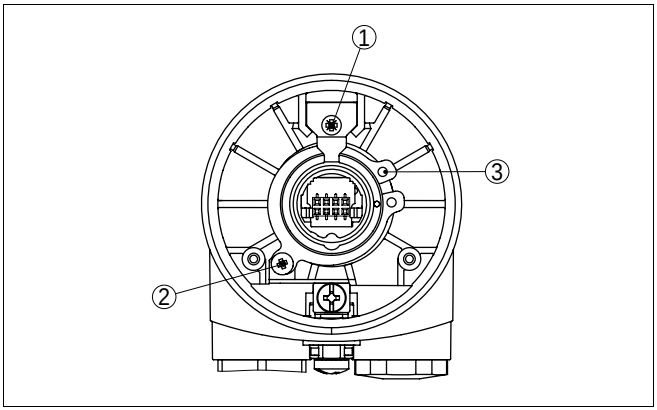

Fig. 5: Position of the screws and locking ring on the example of the plastic housing
1 Screw check angle
2 Screw locking ring
3 Locking ring

2 Open the locking ring with the pliers and remove it

3 With Aluminium double chamber and stainless steel housing loosen the screw on the socket

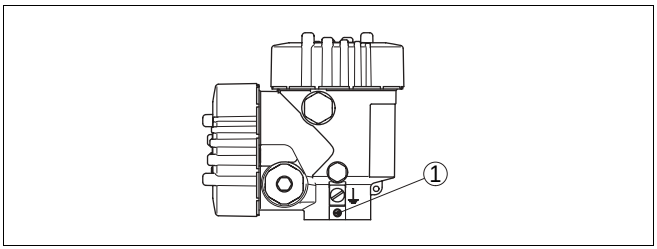

Fig. 6: Double chamber housing
1 Position of the screw

4 Remove the housing

4.4 Mounting steps new housing

1 Place the new housing back on.

2 With Aluminium double chamber or stainless steel housing tighten the locking screw on the socket with a screwdriver

3 Tighten the screws of the check angle and the locking ring with a screwdriver size 1

4 Insert the locking ring with the pliers

5 Insert the oscillator carefully.

Information:
The electronics of most sensor types is connected via a plug. Make sure that the plug is in the correct position. The notch must be in position "18.00 h".

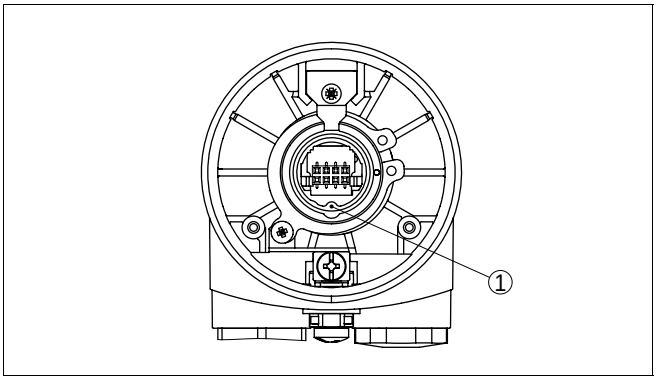

Fig. 7: Plug position
1 Notch

6 Screw in and tighten the two screws with a Phillips screwdriver size 1.

7 Connect the connection cables acc. to the operating instructions manual of the respective sensor

8 Screw the housing cover back on

The housing exchange is finished.

For Ex applications, the housing exchange must be documented in general, internally.

5 Setup

5.1 Setup

The setup is carried out acc. to the operating instructions manual of the respective sensor.

6 Maintenance

6.1 Instrument repair

If it is necessary to repair the replacement component, please proceed as follows:

You can download a return form (23 KB) from our homepage www.vega.com under: "*Services – Downloads – Forms and Certificates – Repair form*".

By doing this you help us carry out the repair quickly and without having to call back for needed information.

- Print and fill out one form per instrument
- Clean the instrument and pack it damage-proof
- Attach the completed form and possibly also a safety data sheet to the instrument.
- Send the instrument to the respective address of your agency. In Germany to the VEGA headquarters in Schiltach.

7 Dismounting

7.1 Dismounting procedure

Take note of chapters "*Mounting*" and "*Connecting to power supply*" and carry out the listed steps in reverse order.

7.2 Disposal

The replacement component consists of materials which can be recycled by specialised recycling companies. We have purposely designed the electronic modules to be easily separable. Mark the instrument as scrap and dispose of it according to national government regulations (e.g. in Germany acc. to electronic scrap ordinance).

Materials: see "*Technical data*"

If you cannot dispose of the instrument properly, please contact us about disposal methods or return.

8 Supplement

8.1 Technical data

Technical data

are stated in the operating instructions manual of the appropriate sensor.

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All statements concerning scope of delivery, application, practical use and operating conditions of the sensors and processing systems correspond to the information available at the time of printing.